West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

For Draft/Proposed Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on October 31, 2008.

Permit Number: **R30-01100007-2008**
Application Received: **September 5, 2012**
Plant Identification Number: **03-54-011-00007**
Permittee: **Huntington Alloys Corporation**
Mailing Address: **3200 Riverside Drive Huntington, WV 25705**

Permit Action Number: *SM03* Revised: *Draft/Proposed*

Physical Location:	Huntington, Cabell County, West Virginia
UTM Coordinates:	379.2 km Easting • 4252.30 km Northing • Zone 17
Directions:	Interstate 64 W to 29th Street Exit, go towards Huntington on Route 60 to the Washington Blvd intersection. Make a right and go across Washington Blvd bridge. Right turn on Riverside Drive. Enter plant through Main Gate.

Facility Description

Huntington Alloys Corporation is a large rolling mill devoted exclusively to the production of wrought nickel and high nickel alloy products. This facility produces ingots, slabs, plate, sheet, strip, billets, rods, wire, pipe and tubing in approximately one hundred and twenty different alloys. It incorporates some two hundred manufacturing operations which include: melting and remelting of metals to produce alloy ingots, hot and cold rolling, forging, drawing, machining, grinding, shot blasting, pickling, annealing, and ancillary testing and by-product recovery operations.

This permit modification addresses the installation of new equipment (kilns, burners, crusher, shot blaster, wash water and rinse water burners, cyclone, ESP, and baghouses) to recycle scrap metal by sizing, cleaning, and drying. This new process will not increase throughput or capacity of existing equipment.

Emissions Summary

Change in Plantwide Emissions Summary [Tons per Year]

Regulated Pollutants	Change in Potential Emissions
Carbon Monoxide (CO)	+3.88
Nitrogen Oxides (NO_X)	+4.62
Particulate Matter (PM_{10})	+4.21
Total Particulate Matter (TSP)	+4.21
Sulfur Dioxide (SO_2)	+4.93
Volatile Organic Compounds (VOC)	+7.23

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 177.23 tons per year of CO, 630.55 tons per year of NO_x, 1092.56 tons per year of PM_{10}, 190.78 tons per year of nickel, 56 tons per year of chromium, and 20 tons per year of hydrochloric acid. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Huntington Alloys Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	PM limits from indirect heat exchangers.
	45CSR7	PM limits on manufacturing processes.
	45CSR10	SO_2 limits.
	45CSR13	NSR Permits.
	45CSR30	Operating permit requirement.
	40CFR64	Compliance Assurance Monitoring (CAM)

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit *(if any)*
R13-2532D	April 13, 2011	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

The emission units associated with the scrap metal recycling section were added to the emission units table. These additions are as follows:

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
TP-2-P	TP-2-S	Plasma Cutter	2011	5,000 lb/hr	None
TP-7A-P	TP-7A-S	Rotary Borings Kiln 1	2011	8,000 lb/hr	Cyclone TP-7A-1C Thermal Oxidizer TP-7A-2C Baghouse TP-7A-3C
TP-8A-P	TP-8A-S	Rotary Borings Kiln 2	2011	8,000 lb/hr	Cyclone TP-8A-1C, Thermal Oxidizer TP-8A-2C, BaghouseTP-8A-3C
TP-7B-P	TP-7B-S	Rotary Kiln 1 Burners	2011	2.0 MM Btu/hr	None
TP-8B-P	TP-8B-S	Rotary Kiln 2 Burners	2011	2.0 MM Btu/hr	None
TP-9-P	TP-9-S	Crusher	2011	7,040 lb/hr 8,975 ton/yr	ESP TP-9-C
TP-10-P	TP-10-S	Shot/Tumbler Blaster	2011	15,000 lb/hr	[1] Baghouse TP-10-C
TP-11-P	TP-11-S	Wash Water Burner	2011	0.83 MM Btu/hr	None
TP-12-P	TP-12-S	Rinse Water Burner	2011	0.44 MM Btu/hr	None

[1]Baghouse TP-10-C in addition to controlling the Shot/Tumble Blaster Process GN34 TP-10-P, controls two other processes: Tumble Blaster TP-1-P and Cabinet Blaster TP-6-P.

Requirements from R13-2532D

Section 14.0 was added to this permit to incorporate new permit conditions for the scrap metal recycling. Most of these permit conditions came from R13-2532D. Those permit conditions are as follows:

Title V Permit Condition	R13-2532D Permit Condition	Description of Condition
14.1.1	5.1.1	Scrap Metal Nickel and Chromium Content.
14.1.2	5.1.2	Emission Point (TP-2-S) - Plasma Cutter PM Emissions.
14.1.3	5.1.3	Control Equipment Guaranteed Collection Efficiencies.
14.1.4	5.1.4	Scrap Metal Processing Rates.
14.1.5	5.1.5	Emission Point (TP-9-S) - Crusher PM Controls.
14.1.6	5.1.6	Emission Point (TP-9-S) - Crusher PM Emissions.
14.1.7	5.1.7	Maximum DHI Rates - NG Burner Equipment.
14.1.8	5.1.8	Emission Point (TP-11-S) - Water Wash Burner – NG Combustion Emissions.
14.1.9	5.1.9	Emission Point (TP-12-S) - Rinse Water Burner – NG Combustion Emissions.
14.1.10	5.1.10	Emission Point TP-10-P - Shot Blast PM Controls.
14.1.11	5.1.11	Emission Point TP-10-P - Shot Blast PM Emissions.
14.1.12	5.1.12	Emission Points TP-7B-P and TP-8B-P – Kiln Burners – NG Combustion Emissions.
14.1.13	5.1.13	Emission Point TP-7A-P – Kiln 1 Exhaust Controls.
14.1.14	5.1.14	Emission Point TP-8A-P – Kiln 2 Exhaust Controls.
14.1.15	5.1.15	Emission Points TP-7A-P and TP-8A-P – Kiln Exhaust Emissions.
14.1.16	5.1.16	Fuel Burning Equipment Opacity Limit – NG Burner: Wash Water, Rinse Water, Kiln 1, Kiln 2.
14.1.17	5.1.17	Quarterly opacity checks of fuel burning equipment listed in 14.1.16.
14.1.18	5.1.18	Fuel Burning Unit Emission Rate Limitation – NG Burner Equipment: Wash Water, Rinse Water, Kiln 1, Kiln 2.
14.1.19	5.1.19	Process Opacity Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.
14.1.20	5.1.20	Quarterly opacity checks of equipment listed in 14.1.19.
14.1.21	5.1.21	Process PM Emission Weight Limitation – Plasma Cutter, Crusher, Shot Blaster, Kiln 1, and Kiln 2.
14.1.22	5.1.22	Sulfur Dioxide (SO_2) In-stack Concentration Limitation – Kiln 1 and Kiln 2 Exhausts.
14.1.23	5.1.23	Operation and Maintenance of Air Pollution Control Equipment.
14.1.24	5.1.24	Compliance testing.
14.2.2	5.2.1	Visual inspection of each particulate matter capture system, points of capture or collection; filter vents, ducts, connections, housings and associated air pollution control devices.
14.2.3	5.2.2	Visual inspection of the operation of each exterior baghouse cleaning system mechanism, interior cleaning equipment and the clean side of bags for evidence of leaks or failure.
14.3.1	5.3.1	Opacity Testing.
14.4.1	5.4.1	Records, Operation, and Compliance.
14.4.2	5.4.2[a]	Equipment Maintenance Records.
14.4.3	5.4.3[b]	Certification of Information.
14.4.4	5.4.2[a]	Record of Maintenance of Air Pollution Control Equipment.
14.4.5	5.4.3[b]	Record of Malfunctions of Air Pollution Control Equipment.
14.4.6	5.4.5	Opacity Records.
14.5.1	5.5.1	Reporting of visible emissions in excess of the opacity limitations.

[a] More than one permit condition has this number.
[b] More than one permit condition has this number.

Compliance Assurance Monitoring (CAM)

The rotary boring kilns (Emission Units: TP-7A-P and TP-8A-P) are subject to CAM. Their pre-control emissions for VOCs exceed the major source threshold. Their emissions are controlled by two regenerative thermal oxidizers (TP-7A-2C and TP-8A-2C). The permittee included a CAM plan with the modification application.

Condition 14.2.1 was added to ensure compliance with the CAM plan included with this permit modification's application. This condition requires the following:

- Monitoring of the thermal oxidizer chamber's temperature by a thermocouple.
- The accuracy of the thermocouple shall be ± 5 ºC.
- Shutdown of the kiln system if it operates below 1,200 ºF for 60 minutes or more.
- Continuous temperature measurement.
- Continuous recording of temperature.
- Checking of average temperature to confirm status of monitoring.
- Annual verification of thermocouple accuracy with a second probe inserted into the incinerator chamber.

Condition 14.2.8 defines an excursion as any instance where the oxidizer temperature is below 1200ºF for at least 60 minutes or any instance where the temperature falls below 1150 ºF. Also, an excursion can only occur when the processing unit (rotary borings kiln) is in operation; the facility may run the oxidizers when the kiln is shutdown, but at a lower temperature.

Condition 14.4.7 was added requiring records of the times and durations of all excursions. Condition 14.4.8 was added requiring records of all testing conducted in accordance with condition 14.2.1.

Additionally, the following general CAM requirements were added:

- Commencement of Operations requirements as specified in 40 CFR §§ 64.7(a) and 64.6(d) (added as Condition 14.2.4).
- Proper Maintenance requirements as specified in 40 CFR § 64.7(b) (added as Condition 14.2.5).
- Continued Operation requirements as specified in 40 CFR § 64.7(c) (added as Condition 14.2.6).
- Documentation of Need for Improved Monitoring as specified in 40 CFR § 64.7(e) (added as Condition 14.2.7).
- Identification of Excursions as specified in 40 CFR § 64.6(c)(2) (added as Condition 14.2.8).
- Response to Excursions or Exceedances as specified in 40 CFR § 64.7(d) (added as Condition 14.2.9).
- Quality Improvement Plan (QIP) requirements as specified in 40 C.F.R. §64.8 (added as condition 14.2.10).
- Recordkeeping requirements as specified in 40 C.F.R. §64.9 (b) (added as condition 14.4.9).
- General reporting requirements as specified in 40 C.F.R. §64.9(a) (added as condition 14.5.2).

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

Compliance Assurance Monitoring (40 C.F.R. 64): With the exception of the rotary boring kilns (Emission Units: TP-7A-P and TP-8A-P), no additional units are subject to CAM. Their pre-control device emissions do not exceed the major source threshold.

Greenhouse Gas Tailoring Rule: There have been no changes that would have triggered a PSD permit. As such, there are no applicable GHG permitting requirements.

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: November 21, 2012
Ending Date: December 21, 2012

All written comments should be addressed to the following individual and office:

Rex Compston, P.E.
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Rex Compston, P.E.
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

Not applicable.